

# **The use of leaves of different tree species as a sorption material for extraction of heavy metal ions from aqueous media**

Alekseeva A., Fazullin D., Kharlyamov D., Mavrin G., Stepanova S., Shaikhiev I., Shaimardanova A.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

## **Abstract**

© 2016, International Journal of Pharmacy and Technology. All rights reserved. In a review article summarizes the literature data on the use of tree leaves as sorption materials for removal of heavy metal ions from aqueous media. It is shown that the sorption characteristics of the leaves of trees and the degree of removal of metal ions depends both on the conditions of adsorption (initial concentration of metal ion, temperature, pH, duration of contact), and from species trees. It is shown that the majority of publications devoted to removal from aqueous media toxic ions Cd(II), Cr(VI), Cu(II) and Pb(II). The greatest sorption performance removal of metal ions and the largest number of publications in the literature devoted to sorption using the leaves of the Neem tree (*Azadirachta indica*).

---

## **Keywords**

Heavy metals, Leaves, Sorption